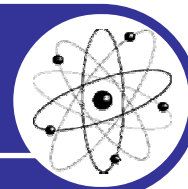




Radioactive News



For Radioactive Material Licensees in North Dakota

 North Dakota Department of Health

What Is Exclusive Federal Jurisdiction?

An area of exclusive federal jurisdiction is an area over which the federal government exercises and maintains legal control without interference from the jurisdiction and administration of state law. This means that in such areas, the federal government has sole jurisdiction for both civil (e.g., regulatory) and criminal matters. This sole jurisdiction includes issues involving health and environmental protection, such as the regulation of radioactive material use.

In order for an area of exclusive federal jurisdiction to be created, the federal government exercises its authority over the state at the specific locale. Some of these areas were created several years ago and new ones occasionally are created as the need arises. By the same token, the federal government also will relinquish jurisdiction over certain areas to the state when the areas no longer warrant exclusive federal control.

Federal ownership of lands or facilities does not necessarily mean that the area is classified as "Exclusive Federal Jurisdiction."

Whether or not a federal enclave is an area of exclusive federal jurisdiction must be determined on a case-by-case basis, since the status is subject to change. Commonly, these areas are on military bases where, for purposes of national security, the federal government believes it needs exclusive control.

Sections of North Dakota's Air Force bases, tribal lands, border stations, post offices, etc., potentially may be under federal jurisdiction. If there is a question of jurisdictional status, the North Dakota Department of Health Radiation Control Program recommends that licensees ask the federal agency's local contact (e.g., contract officer, base environmental health officer, district office staff, Judge Advocate General, etc.) to help determine the jurisdictional status of the land or facility. A written statement concerning the jurisdictional status is not required; however, it is highly recommended that the licensee obtain such a statement for future reference and inspection purposes.

Jurisdictional Determination for Federal Sites

Licensees who are uncertain about the jurisdictional status of a proposed worksite on federal property should take the following steps:

- ❖ Obtain specific information about the location of the proposed worksite (e.g., street address, range or township, building or hangar number, distance from a specific intersection or other identifying details) and the identity of the federal agency controlling the proposed worksite.
- ❖ Consult the federal agency's local contact (contract officer, base environmental health officer, district office staff or regional office staff) and request information about the jurisdictional status of the proposed worksite. It is recommended that licensees request such a statement of jurisdiction in writing. Otherwise, licensees should document for their records the date and the name and title of the person at the federal agency who provided the

(Continued on page 4)

In This Issue

WHAT IS EXCLUSIVE FEDERAL JURISDICTION?	1
TRANSPORTATION RULE CHANGES	2
SAMPLES OF RECENT ENFORCEMENT ACTIONS	3

NOTICE:

This document is constructed of 100 percent matter... In the unlikely event that this newsletter should contact antimatter in any form, a catastrophic explosion will result. The editor is not liable for any damages which may ensue.

Transportation Rule Changes

The U.S. Department of Transportation amended its Hazardous Material Regulations (49 CFR Parts 100-185) to ensure continued consistency between domestic and international shipping regulations. Voluntary compliance with this amendment began Feb. 25, 2004. The effective date for mandatory compliance is Oct. 1, 2004.

A few key points of the rulemaking that may affect shipment of licensed radioactive material for North Dakota licensees include:

- ☛ Adoption of “nuclide-specific” exemption values for the basic definition of radioactive material instead of the previous all-nuclide encompassing activity concentration limit of 2000 pCi/g.
- ☛ Changes in the A_1 and A_2 values for radionuclides presented in § 173.435.
- ☛ Requirement of marking the appropriate United Nations (UN) number on excepted packages.
- ☛ Use of only the proper shipping names listed in the revised Hazardous Material Table in § 172.101. The following table provides just a few samples of the revised shipping names:

Proper Shipping Names and Corresponding UN Numbers (Optional Wording in <i>Italics</i>)
Radioactive Material, Excepted Package – Empty Packaging, UN 2908
Radioactive Material, Excepted Package – Instruments or Articles, UN 2911
Radioactive Material, Type A Package, <i>Non Special Form, Non Fissile or Fissile-Excepted</i> , UN 2915
Radioactive Material, Type A Package, Special Form, <i>Non Fissile or Fissile-Excepted</i> , UN 3332
Radioactive Material, Type B(U) Package, <i>Non Fissile or Fissile-Excepted</i> , UN 2916

SAY WHAT?

There is not the slightest indication that nuclear energy will ever be obtainable. It would mean that the atom would have to be shattered at will. – Albert Einstein, 1932



More detailed information and a complete description of all the changes made to the Hazardous Material Regulations were published in the Federal Register (Vol. 69, No. 16, Pg. 3631-3696) Monday, Jan. 26, 2004.

Full text of the Federal Register Final Rule notice is available in Adobe Acrobat (PDF) format at hazmat.dot.gov/69fr-3631.pdf or may be viewed alternatively as a webpage by visiting hazmat.dot.gov/rules/69fr-3631.htm.

If you have questions regarding these changes, please contact the North Dakota Department of Health's Radiation Control Program at 701.328.5188 or Michelle Sampson, program manager of Radioactive Material Enforcement, U.S. Department of Transportation, at 202.366.4700. ☛

Radioactive News is a publication of:



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Do you like or dislike this newsletter? Send comments to Justin using the email address above.

Did you know: In 1999, the average cost of power generation for nuclear plants was only \$0.0183 per kilowatt-hour?...

Samples of Recent Enforcement Actions

Noncompliance with established regulations discovered during inspections performed by regulatory agencies often result in citations, violations and even civil penalties. It is hoped that by reviewing the following violations and penalties, extra care will be taken in maintaining your radiation safety program while performing licensed activities. A few examples of violations and associated penalties assessed by the U.S. Nuclear Regulatory Commission (NRC) so far in 2004 appear below:

- ❖ A notice of violation and civil penalties in the total amount of \$21,000 were issued for willful violations involving radiation exposures in excess of the annual public exposure limit and failure to perform surveys appropriate to demonstrate compliance with dose limits for individual members of the public (\$15,000) and failure to provide copies of two exposure reports to the six affected individuals (\$6,000).
- ❖ A notice of violation and a civil penalty in the amount of \$19,200 were issued for multiple violations related to an overexposure of a radiographer, including issues such as failure to survey, failure to calibrate and inspect equipment, and failure to follow procedures. In this case, the NRC imposed twice the base penalty because of the licensee's particularly poor performance.
- ❖ A notice of violation and civil penalties in the total amount of \$12,000 were issued for failure to maintain adequate security of a radiographic exposure device (\$6,000) and the failure to give a written exam before allowing a newly hired individual to function as a radiographer's assistant (\$6,000).
- ❖ A notice of violation and a civil penalty in the amount of \$6,000 were issued for a willful violation involving a licensee's failure to conduct the required annual industrial radiographer refresher training and failure to provide complete and accurate information to the NRC involving radiographers' training records.
- ❖ A notice of violation and a civil penalty in the amount of \$6,000 were issued for deliberate failure to provide complete and accurate information to the NRC concerning the location of certain gauges containing radioactive material.
- ❖ A notice of violation and a civil penalty in the amount of \$3,000 were issued for a violation involving the failure to control and maintain constant surveillance of licensed material (11 millicuries of cesium-137 and 40 millicuries of americium-241 in a portable gauge) in a controlled or restricted area. This security lapse subsequently resulted in loss of the gauge during transportation.
- ❖ A notice of violation and a civil penalty in the amount of \$3,000 were issued for a licensee's willful failure to control and maintain constant surveillance of licensed material (approximately 50 millicuries of americium-241 contained in a portable moisture density gauge) located in an unrestricted area, and failure to lock the portable gauge or its container when not under the direct surveillance of an authorized user.
- ❖ Authorized gauge users left two unlocked portable nuclear gauges unsecured and unattended in an unlocked storeroom at a licensee's facility. This resulted in a violation for failure to secure from unauthorized removal, or limit access to, radioactive material located in unrestricted areas and failure to control and maintain constant surveillance of this radioactive material. A civil penalty was not levied in this instance.
- ❖ An immediately effective order for suspension of licensed activities and a demand for information were issued based on the conclusion that an industrial radiography licensee deliberately violated radiation safety requirements and deliberately provided inaccurate and incomplete information to the NRC. The case is still pending.

Additional examples of the NRC's significant enforcement actions can be reviewed in the NMSS Licensee Newsletter, which is available online at www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0117/. ❖



While the average costs for coal-fired, oil and natural gas plants were \$0.0207, \$0.0324 and \$0.0352 per kilowatt-hour, respectively.

(Continued from page 1)

jurisdictional determination.

- ❖ If the worksite is identified as falling under exclusive federal jurisdiction and the licensee has only a North Dakota (or other Agreement State) license, the licensee must obtain reciprocity from the U.S. Nuclear Regulatory Commission (NRC) to operate in the areas of exclusive federal jurisdiction. If the licensee possesses an NRC license with authorization for temporary job sites, no additional action is required to work in the area.
- ❖ If the worksite is not specifically identified as exclusive federal jurisdiction, responsibility for regulation of radioactive material at that location is maintained by North Dakota's Radiation Control Program. In this instance, licensees must either have reciprocity with the state or a specific North Dakota license to use radioactive material at the location.

Licensees who plan to conduct regulated activities on Native American land in North Dakota should contact NRC's Region IV office in Arlington, Texas, at 800.952.9677. The NRC regional office liaison will confer with North Dakota's Radiation Control Program, the Native American representatives and the licensee concerning the jurisdictional question for the particular project. Tribal governments or tribal members seeking their own radioactive material license also should contact NRC's Region IV office for more information. ☼

Blast from the Past

March 10, 1956 – Exact Location Unknown

A B-47 carrying two nuclear capsules on a non-stop flight from MacDill Air Force Base in Tampa, Fla., to an overseas air base failed to contact its tanker over the Mediterranean for a second refueling. After an extensive search, no trace was found of the B-47 or its crew or cargo. (Source: U.S. Defense Department)

WHO REGULATES THE ACTIVITY?

APPLICANT AND PROPOSED LOCATION OF WORK	RESPONSIBLE REGULATORY AGENCY
Federal agency – regardless of location	NRC
Non-federal entity in a non-Agreement State (e.g., South Dakota)	NRC
Non-federal entity in Agreement State (e.g., North Dakota) at non-federally controlled site	State Radiation Control Program
Non-federal entity in Agreement State at federally-controlled site NOT subject to exclusive federal jurisdiction	State Radiation Control Program
Non-federal entity in Agreement State at federally-controlled site subject to exclusive federal jurisdiction	NRC

I S H C L G R O E N T G E N R
 S B P O E D N B N G X C V A K
 O S U N R X D I A E N R D K N
 T O U T E B S M D A U I S U U
 O A A A U S M C T L O T C A E
 P M L M Q A A S I A E L R C Z
 E U P I C A I F C S E I R O N
 A I H N E D R T E A Y U H M N
 T S A A B A I A R T O H E S T
 E E R T L V U L L S Y F P Z T
 B C W I E N O I T A I D A R G
 G I M O T R E V E I S D O S E
 A I O N I Z E M S F Z G D B N
 E I R U C R I A D E A A D J H
 Z F T K A T I X W I P R Z T B

RADIATION SAFETY

WORD FIND

ALARA	NEUTRON
ALPHA	NUCLEAR
BECQUEREL	PHYSICS
BETA	RADIATION
CESIUM	RADIOACTIVE
CONTAMINATION	ROENTGEN
CURIE	SAFETY
DISTANCE	SHIELDING
DOSE	SIEVERT
GAMMA	SOURCE
IONIZE	TIME
ISOTOPE	☼